

[US 4,112,405] and Tabuchi et al. [US 5,941,357]." This rejection is respectfully traversed.

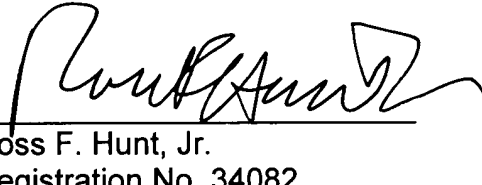
Although it is agreed that the Joseph patent discloses a molded temperature sensor accommodating portion for accommodating a fuse 34 and that the Tabuchi et al. patent discloses a similar temperature fuse 13 mounted in a coil spool 14, it is respectfully submitted that these two references are essentially non-analogous art. The present invention relates to microwave ovens and to high voltage transformers for such ovens. In contrast, the Joseph patent relates to a coil or winding for an electric motor and to providing protection against overheating of such a coil while the Tabuchi et al. patent discloses a temperature fuse arrangement for an electromagnetic clutch. It is respectfully submitted that nothing taught by nor suggested in the Joseph patent nor the Tabuchi et al. patent would lead the application of the teachings thereof to microwave ovens.

Further, it is respectfully submitted that the claims patentably distinguish structurally from the teachings of the two references. In the present invention, the temperature sensor is accommodated in a sensor accommodating portion separately from the coil wound on a coil spool, and the temperature sensor is exposed on one side thereof to the secondary coil but is otherwise completely enclosed within the sensor accommodating portion of the insulating molding part. Among other advantages, this feature of the invention permits the sensor to be molded together with the secondary coil into an integral unit, as described in the specification at page 9, second full paragraph.

Allowance of the application in its present form is respectfully solicited.

Respectfully submitted,

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ATTACHMENT A

Amendments to the Claims

Following herewith is a complete listing of the claims, including a marked copy of the currently amended claims.

1. (Previously Amended) A high voltage transformer for a microwave oven, said transformer including a core and primary and secondary coils, and further comprising:
an insulation molding part enclosing at least a part of said secondary coil and including a sensor accommodating portion; and
a temperature sensor, accommodated in said sensor accommodating portion, for detecting the temperature of the secondary coil, said temperature sensor being exposed on one side thereof to said secondary coil but being otherwise completely enclosed within said sensor accommodating portion of said insulation molding part.
2. (Original) The high voltage transformer according to claim 1, wherein said sensor accommodating portion is disposed inside of said insulating molding part.
3. (Original) The high voltage transformer according to claim 2, wherein said sensor is disposed directed adjacent to said secondary coil inside of said insulating molding part.
4. (Original) The high voltage transformer according to claim 2, wherein said temperature sensor comprises one of a thermostat and a thermistor.
5. (Currently Amended) The high voltage transformer according to claim 1, wherein said sensor accommodating portion is of a shape permitting said temperature sensor to be put into, ~~and taken out of,~~ said sensor accommodating portion.
6. (Cancelled)

7. (Original) The high voltage transformer according to claim 4, wherein said temperature sensor comprises one of a thermostat, a thermistor and a fuse.

8-15. (Cancelled)

16. (Currently Amended) A microwave oven including a housing, a cooking chamber within said housing, an electronic component compartment within said housing, a door for said cooking chamber, and a control panel installed within said housing in front of said electronic compartment, said electronic component compartment including a high voltage transformer for generating a high voltage when the microwave oven is supplied with power from a power supply, a high voltage capacitor which is charged to a high voltage by the high voltage transformer, and a magnetron for generating microwaves and radiating the microwaves into the cooking chamber when discharge of the high voltage capacitor supplies the magnetron with a high voltage, said high voltage transformer including a core and primary and second coils, and further comprising:

an insulating molding part enclosing at least a part of said secondary coil and including a sensor accommodating portion; and

a temperature sensor, accommodated in said sensor accommodating portion, for detecting the temperature of the secondary coil, said temperature sensor being exposed on one side thereof to said secondary coil but being otherwise completely enclosed within said sensor accommodating portion of said insulating molding part, and said temperature sensor and by secondary coil being molded together by said insulating molding part to form an integral unit.